



2023 Massachusetts Geological Society Cape Cod Field Trip Overview

Byron and Janet Stone, chief compilers of the recently published surficial materials map and geodatabase of Massachusetts, will be leading a field trip to examine the geology of Cape Cod. The trip will visit classic stratigraphic localities that reveal evidence of meltwater processes active in construction of the large glaciodeltaic landforms of the outer Cape. We also will visit fresh pit exposures in large recessional moraines and outwash deposits of the western Cape. Holocene coastal and marine deposits of the Provincetown Hook, Wellfleet Harbor, and seashore beaches will be discussed and visited. Our goal is to provide you with the latest stratigraphic framework of the Cape Cod area and a discussion of this part of the new Quaternary Geologic Map of Massachusetts. The trip also features discussions about the bedrock surface beneath the Cape, distribution of Coastal Plain sediments on top of rock, history of subsurface studies, drill holes, ongoing contamination studies in aquifer zones, offshore geology, the last marine transgression, and developments in Quaternary geochronology of the area. This is a re-run of a portion of the 2019 Northeast Friends of the Pleistocene field trip that is being held just for the Massachusetts Geological Society.

The field trip officially begins on Saturday, June 10, but we are planning an optional day that is scheduled for Friday, June 9th for those who can attend. On **SATURDAY**, we will examine sea cliff exposures and talk about the offshore and subsurface geology. On **SUNDAY**, we will visit sand and gravel excavations in the recessional moraines. The map on the following page indicates possible pending accessibility and timing. A final list of field trip stops and assembly times and locations will be forwarded when field trip plans are finalized. The plan is to end the trip on Sunday near Sandwich to facilitate departure.

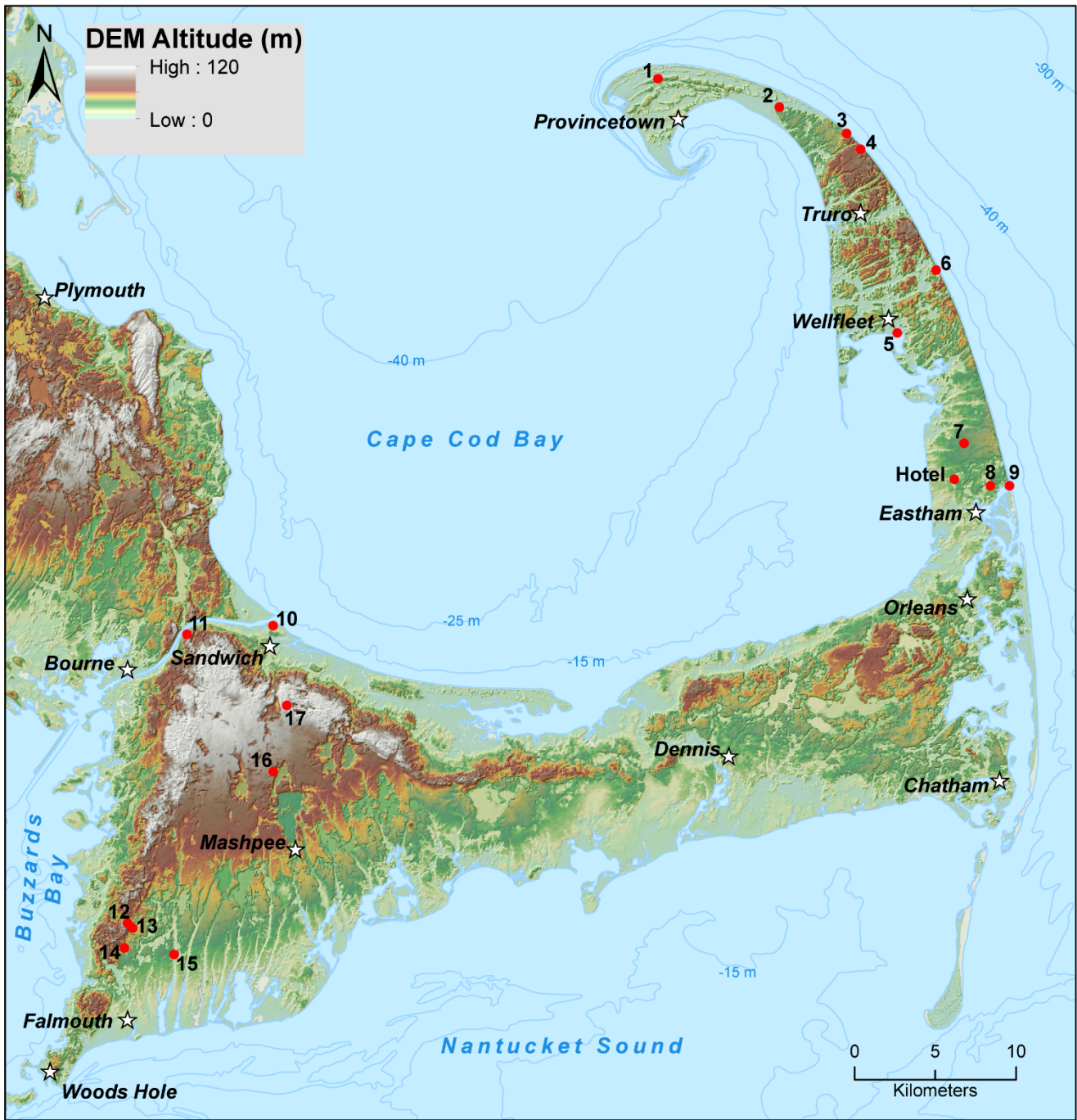
NOTE: Some of the field exposures are down steep cliffs and some require a lengthy hike on the beach.

Also note that ticks, as well as bugs, are an issue on the Cape at this time of year, so take precautions including using repellent containing DEET. Tuck pants in socks, wear light-colored clothing and check your legs often and at the end of the day. Sun screen and hats are also a must.

For more information about the field trip itself, please contact:

Steve Mabee at sbmabee@geo.umass.edu or Byron Stone at bdstone@usgs.gov





2023 Massachusetts Geological Society Cape Cod Field Trip

June 9th to June 11th (Friday-Sunday)

Registration Form

Name _____

Address _____

Phone _____ Email _____

Organization/Affiliation _____

Emergency Contact _____

Emergency Contact Phone _____ Relation _____

Saturday/Sunday Box Lunch choice (circle): Deli Meat/Salad Veggie Gluten Free

The registration fee to attend the meeting is **\$50 for members, \$70 for non-member (\$20 of which will go toward membership, as you must be a member to go on the trip)**. If you were a member in 2016 or anytime thereafter, you are still considered to be a member for 2023. The registration fee covers the cost of trip buses on Sat/Sun, box lunches on Sat/Sun, and the guidebook.

Dinner on Saturday will be a barbeque at the local Elks Lodge in Eastham, which will include barbequed chicken, hamburgers, hotdogs, and assorted salads. The cost for attending **dinner on Saturday is \$40**. There will be a cash bar that will be at least partially subsidized by a generous sponsor, GZA GeoEnvironmental.

If you are bringing additional guests to the banquet, please include number of additional guest/s here _____ and add **\$40** per person to your check.

Please indicate below whether you are registering for the field trip only or for the field trip and the dinner on Saturday:

field trip only _____

field trip and Saturday dinner _____

Please register by May 26th in order to assist us with making final arrangements.

~*~*~*~*~*~*~*~*~*~*~*~*

Payment Information

To pay by check, please make check payable to: **Massachusetts Geological Society** and send the Registration Form, along with a check to: Massachusetts Geological Society, 596 Main Street, Woburn, MA 01801.

To pay via PayPal, please email the registration form to geoinfo@massgeosociety.org and you will be sent an invoice that will allow you to pay using PayPal or a credit card.

We look forward to seeing you in June!!

